

Nuclear Division earns 'best-ever' safety record



INSPECTION TEAM—Contributing substantially to ORGDP's environmental safety is the Plant Appearance Inspection Team, seen above preparing to conduct the last of four quarterly inspections for the year. From left are Jack W. Hodge, Kenneth W. Sommerfeld, plant manager; Paul F. Reeverts, Robert W. Levin, James B. Hill Jr. and Davis A. Coleman. Plant areas are inspected during the year and the findings are forwarded to the division managers, who take corrective action to alleviate the condition.

Fewer accidents, reduced injury rates, minimal property damage, decreased motor vehicle accidents, less fire losses, and fewer off-the-job accidents... that's the word for the Nuclear Division's safety performance for 1979, as all four facilities report banner safety performance.

The entire Division sustained only six occupational injuries which resulted in lost workdays. Based on the number of cases per 200,000 employee hours, the end-of-year Lost Workday Case Incidence Rate (LWCIR) is 0.03, the lowest in the Division's history. Union Carbide is projecting its Corporate-wide (excluding UCC International) LWCIR rate for the year to be around 0.16.

State of Laboratory set for January 29

ORNL Director Herman Postma will present the annual State of the Laboratory address at 8 p.m., Tuesday, January 29, 1980, in the auditorium of the American Museum of Science and Energy. At 7:30 p.m., a multimedia slide presentation, "Images of ORNL," developed by the Information Division's Photography Department, will be shown in the Museum Auditorium.

Nuclear Division employees, their families and friends are cordially invited to attend the slide show, talk and social hour. Refreshments will be served following the presentation.

ORGDP led the four installations, working the entire year without a lost workday case, and continues to extend its accident-free days to more than 400, amounting to more than 12,500,000 employee hours. In addition to leading the Nuclear Division in on-the-job safety performance, ORGDP also reported the lowest off-the-job disabling injury record among the four facilities.

Top awards

Highest awards will go to the Division facilities as individual honors were earned from Union Carbide Corporation, the Department of Energy and the National Safety Council. UCC's Distinguished Safety Award (the Corporation's top recognition) goes to ORGDP for operating a 384-day period, 12,087,535 hours; to the Y-12 Plant for a 242-day period, 8,194,008 hours; and to ORNL for a 174-day period, 4,026,732 hours. The Paducah Plant takes UCC's Safety Achievement Award for a 285-day period, 3,525,757 hours.

DOE's Award of Excellence is expected for all four of the Division's facilities, presented for reducing the incidence of lost workday and restricted work cases by at least 25 percent of the average incidence for the award year and two previous years; or for maintaining the incidence of lost workday and restricted work cases below 1.0 for four consecutive years.

NSC's highest

The National Safety Council's highest award, an Award of Honor, recognizes the 27,834,032 employee-hours amassed without a lost workday case in four different periods at the four installations.

The 0.3 injuries per thousand employees previously mentioned, shows the excellence of this record when compared with the 1978 average injury record of the 80 largest chemical companies in the country, which was 8.5 lost workday cases per thousand employees.

The most serious of the six occupational lost workday cases was an accident in which a Y-12 Plant employee received severe face, arm and chest burns as the result of a lithium hydride powder flash fire in a glove box. Three of the other reported cases involved unsafe acts which resulted in fracture and/or laceration of fingers. Another

(Please turn to Page 8)



TYPICAL SAFETY MEETING—A typical formal safety meeting for craft employees is in progress. These programs have been outstanding throughout ORGDP, and have contributed significantly to the success of the overall safety program at the plant.

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New series EE bond on sale

On January 2, 1980, U.S. Energy Savings Bonds, Series EE, went on sale at banks and other savings institutions. Numerous phone calls have been received inquiring as to when the Nuclear Division will offer this series for bonds purchased through payroll deductions.

Bonds purchased through the Payroll Savings Program will be converted to the new Series EE bonds by June 30, 1980. Employees will be notified in advance of this change.



AS PART OF A LABORATORY-WIDE VOLUME-REDUCTION EFFORT, the wastes here are compacted within cardboard containers that are sealed with steel bands, enclosed in plastic and taped before disposal in shallow trenches.



A NINE-TO-ONE REDUCTION in the volume of compactible low-level solid radioactive waste is achieved with this 50-ton compactor, now in operation at ORNL. Bagged wastes are added several times and pressure applied before the compacted waste is packaged in cardboard containers and sealed in plastic for shallow-trench disposal.

ORNL reduces volume of low-level waste for burial

ORNL has achieved a 36 percent reduction in the volume of low-level solid radioactive waste which it commits to on-site burial.

The reduction, from 84,000 to 54,000 cubic feet annually, has been accomplished through a Laboratory-wide effort that emphasizes both better control at the point of origin and improved handling procedures before disposal of these low-level materials.

The volume-reduction program has been carried out since mid-1978 by Waste Management Operations Group under Edward M. King. It has involved establishment of a new procedure for better entry control of materials going into contaminated zones and decontamination of equipment and materials for reuse or disposal as noncontaminated waste.

In support of these measures, guidelines were established for classifying, handling, sorting, and packaging waste. An internal policy change now requires that costs of disposal services be charged back to the operating and research groups where wastes originate.

Program objectives also have been facilitated by the use of a new waste compactor and an active ORNL-wide "awareness" effort involving management communications, newsletter articles, bulletin-board posters, audiovisual presentations, and walk-through inspections of waste-generation sites.

The largest volume of solid radioactive waste generated consists

of "laboratory trash"—glassware, paper, rags, etc. Other wastes include solid residues from physical and chemical experiments.

These low-level wastes are distinguished from high-level wastes produced in the reprocessing of spent nuclear fuel. ORNL does not generate any high-level wastes.

The formal volume-reduction program includes better segregation of noncontaminated from contaminated waste, separation of low-level general radwaste into noncompactible and compactible parts, compaction at the disposal area prior to burial, and better packaging of noncompactible waste to reduce voids and facilitate handling. The program started with installation of a 50-ton compactor designed specifically for dry, low-level, solid radioactive waste materials. A significant procedural change provides for locking radioactive waste collection containers and vesting the local health physics surveyors with access control responsibility.

Also started was disposal of low-hazard waste in a special landfill within burial grounds in areas unsuitable for conventional trench-type disposal. These low-hazard wastes have no measurable contamination but are judged, because of their history, to be unfit for release from waste management control.

The energy advisor...

Editor's Note: Recently we began a series of energy conservation features which will be alternated with questions from readers to the "Energy Advisor" on conservation-related topics. The articles will be written by staff members about their own experiences or research, with the Energy Division's Merl Baker (alias the Energy Advisor) coordinating the series. Employees with questions or ideas for articles should contact their Nuclear Division News representative listed on the masthead.

QUESTION: I often hear that 110-volt space heaters are less efficient than 220-volt space heaters and both are less efficient than central heating units. Is this true? If so, how can electricity be converted into heat at less than 100 percent efficiency? What happens to the other electricity if it is not 100 percent efficient?

ANSWER: The voltage at which an electric space heater operates has no effect on its efficiency. All types of electric resistance heaters are 100 percent efficient when the output at the heater element is measured relative to the energy metered to the house. The supply wiring required for a 220-volt heater is smaller than for one of the same output operating at 110 volts. Accordingly, larger heaters are designed for 220 volts.

Space heaters will not heat a house, or room, as uniformly as a central system. Therefore, comfort is less with a space heater than a central system. The amount of heat provided by a space heater as a consequence of nonuniformity is usually less than

from a central system. Accordingly, the monthly cost is less. A central heating system may suffer a loss of heat to unheated spaces from air ducts or water pipes, whereas a space heater located in the living space is 100 percent efficient.

Electric energy losses occur at the generating plant and in the transmission system. The electric utility has to pay for these losses, since they occur before reaching the customer's meter. Even in the most efficient electric generating and distribution systems (transmission wires and transformers), a unit of energy delivered to the customer necessitates a loss of two units. Therefore, only one-third of the heating value of coal or uranium consumed at the power plant reaches the customer in the form of electricity.

Since electricity is a high-grade energy source, its use for space heating (except for driving heat pumps) should be limited to supplementary purposes such as bathroom heaters.

wanted...



ORGDP

JOIN CAR POOL from Lovell Heights, Knoxville, to portal 2 or 4, 7:30-4 p.m. shift. Luther Sheridan, plant phone 6-0035, home phone Knoxville 966-8952.

FOURTH CAR POOL MEMBER from Kingston Pike, Campbell Station Road areas, to Portal 2, 7:45-4:15 p.m. shift. Sandy Tronolone, plant phone 4-9412, home phone Knoxville 966-3904.

COMMUTER BUS from Lenoir City, beginning February 4, to Portals 1, 2 and 3. 7:45-4:15 p.m. shift. Bill Smith, plant phone 6-0290, home phone Lenoir City 986-6706.

JOIN CAR POOL from Lovell Road section, Knoxville, to Portal 4, 7-4:15 p.m. shift. Larry Moore, plant phone 4-8333.

CAR POOL MEMBER from Cedar Bluff exit off I-40 area, Knoxville, to any portal, straight day. Ginny Nelson, plant phone 4-3320, home phone Knoxville 693-4755.

JOIN CAR POOL or will take two RIDERS from Rockwood to any portal, 8 a.m.-4:30 p.m. James Rogers, plant phone 4-8762, home phone Rockwood 354-1872.

RIDE from Ball Road, West Knox County, D Shift, to Portal 5. Jack McKinney, plant phone 4-1301, home phone Knoxville 690-1888.

CAR POOL MEMBERS from Cedar Bluff-Middlebrook Pike areas, West Knoxville, to Portal 2 or 3, 7:45-4:15 shift. Karen Linko, plant phone 6-

4559, home phone Knoxville 693-1155 or 947-9577.

Y-12 PLANT

RIDE or JOIN CAR POOL from Brendon Park Apartments, Cedar Bluff exit, to Biology Portal, straight day. Terry Shope, plant phone 4-0555, home phone Knoxville 691-3528.

RIDE from Plumb Creek subdivision, off Lovell Road, West Knoxville, to East Portal, straight day. Jane McConnell, plant phone 4-0070, home phone Knoxville 690-0175.

VAN POOL RIDER from Maryville to any portal, straight day. Darell Coppenger, plant phone 4-1380, home phone Maryville 983-5939.

ORNL

CAR POOL MEMBER from Cedar Lane area to East Portal, 8:00 or 8:15 a.m. shift. Hal Goeller, plant phones 4-6605 or 4-4065, home phone 688-4271.

JOIN or FORM CAR POOL from Westhaven area, Knoxville, to any portal, 8-4:30. Fred Weber, plant phone 4-5476, home phone 523-0718. 0718.

JOIN CAR POOL from New Ridge/Nebraska Roads, Oak Hills subdivision, Oak Ridge, to North or West Portal, 8-4:30. Paul Bredderman, plant phone 4-7798, home phone 482-4359.

JOIN or FORM CAR POOL from Guinn Road/Solway Road area to East Portal, 8:15-4:45. Richard Hahn, plant phone 4-4995, home phone 482-1201.

New chief, six captains named in ORGDP plant protection

An organizational realignment in the Security and Plant Protection Division at ORGDP has been announced. Captain David A. Coleman has been named chief of the Fire Department, J. D. Hunter, Richard D. Hughes and David M. Hope have been named captains in the Fire Department, and John A. Cox, James E. Cozart and Terra K. Townsend have been promoted to captains in the Guard Department.

Coleman, a native of Kingsport, joined Union Carbide in 1973, after working as a fire fighter and operator for the city of Oak Ridge. He has an associate degree in fire science from Roane State Community College, has attended the University of Tennessee and is enrolled at Memphis State, studying fire administration. He is a member of the Society of Fire Protection Engineers.

Mrs. Coleman is the former Mary Duck, and the couple lives at 2036 Woody Drive, Kingston. They have two daughters, Mary and Sara.

Cox, a native of Knoxville, worked as an assistant director for the Anderson County Ambulance Service prior to joining Union Carbide in 1974. He is married to the former Joy Meredith, and they live at Route 6, Clinton, where he serves as a volunteer fireman in Clinton, South Clinton and Claxton. They have a son, John.

Cozart was born in Lenoir City. He worked at the University of Tennessee Hospital and Oak Ridge Associated Universities before joining Union Carbide in 1967. He is married to the former Patricia Clark, and they live at 1012 Broad Street, Sweetwater. They have four children, Michael, Joe, Wanda and James Jr.

Hope, a native of Oak Ridge, was a firefighter for the city before joining Union Carbide in 1973. He attended State Area Vocational School. He is married to the former Teresa Ray, and they have two children, Kurt and Amber. The Hopes live at 108 Audubon Road, Oak Ridge.

Hughes is also a native of Oak Ridge, and he attended Cleveland



Terra K. Townsend

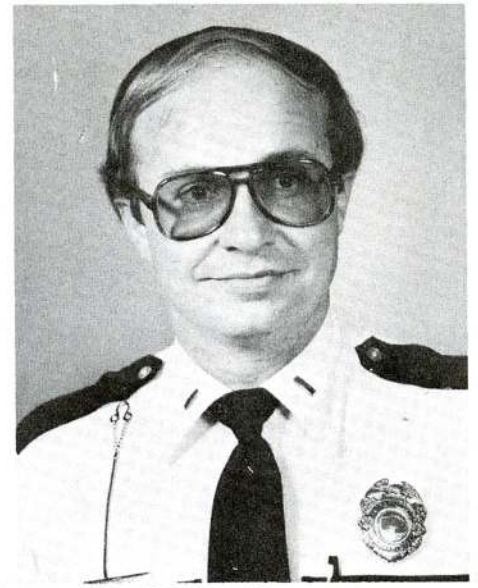
State Community College and worked in restaurant management before coming to ORGDP in 1974. He is married to the former DiAnne Easton, and they have three children, Shawn, Eric and Damon. They live at Route 1, Harriman.

Hunter was born in Petros and attended Roane State Community College. He worked with the Orkin Exterminating Company and completed the TAT training program at Y-12 before coming to ORGDP in 1973. Mrs. Hunter is the former Dorothy Greene, and they live at Route 3, Oliver Springs. They have two children, Tina and Jim.

Townsend was born in Kingston and is presently attending Roane State Community College. She joined Union Carbide in 1969 and is a member of the "Carbide Blue" Pistol Team, the "Governor's 20," and was among the top 20 shooters in Tennessee in 1978.



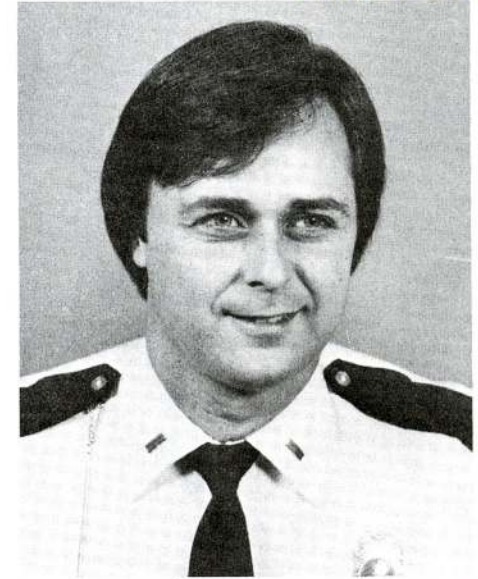
David A. Coleman



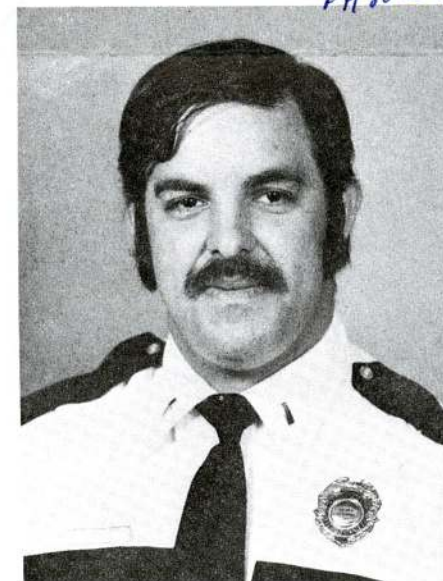
John A. Cox



James E. Cozart



David M. Hope



Richard D. Hughes



J. D. Hunter



SUBTLE ERRORS—The Paducah Plant Engineering personnel recently staged some unsafe acts, both on and off the job, that invite accidents. Andy Mason, Mike Flood, Jay Collins and Bruce Kersey show some subtle errors made on golfing greens that sometimes invite disaster.

Nuclear Division holidays spell long weekends during 1980

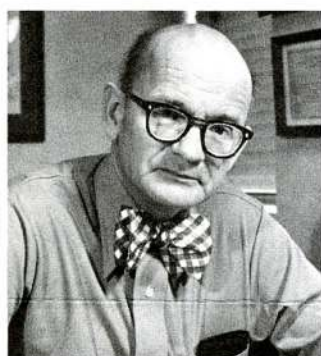
The remaining nine holidays will give Carbiders in the Nuclear Division a lot of long weekends. The next paid holiday is set for Monday, February 18. They are as follows:

Presidents' Birthday	Monday, February 18
Good Friday	Friday, April 4
Memorial Day	Monday, May 26
Independence Day	Friday, July 4
Labor Day	Monday, September 1
Thanksgiving	Thursday, November 27
Day after Thanksgiving	Friday, November 28
Christmas Eve	Wednesday, December 24
Christmas Day	Thursday, December 25



CLERICAL GRADUATES—The Paducah Plant has completed another session of Clerical Training Courses, conducted by Mary Lou Gholson. Fifteen clerical/secretarial employees completed the sessions covering subjects of the Nuclear Division Office Guide, benefit plans, plant operations, environmental protection, library and technical reports,

security, affirmative action, telephone techniques, etc. Graduates in the front row, from left, are: Susan Mize, Gayle Church, Rhonda Eskridge, Kim Jones, Martha Burgess, David Griffin, Karon Peyton and Toni McCutcheon. In the back row are Dorothy Guess, Darlene Coffey, Betty Hunt, Mona Blankenship, Shelia Davis, Rachel Jones and Brenda Ashley.



Polio vaccine update

by T. A. Lincoln, M.D.

(Editor's Note: Dr. Lincoln alternates his regular column with "The Medicine Chest," where he answers questions from employees concerning health in general. Questions are handled in strict confidence, as they are handled in our Question Box. Just address your question to "Medicine Chest," NUCLEAR DIVISION NEWS, Building 9704-2, Stop 21, Y-12, or call the news editor in your plant, and give him or her your question on the telephone.)

Last summer a minor epidemic of poliomyelitis occurred in Pennsylvania. Individuals who had traveled or were planning to travel in the area suddenly became concerned about their vulnerability to this disease. Most had been immunized against polio but had received the vaccine 10 or more years ago. They wondered whether they were still protected.

As physicians were consulted, we began to realize that immunization against polio is still an area of considerable controversy.

Chemotherapy—genetic deficiency may impair immune systems.

It has now been established with reasonable certainty that 76 cases of paralysis have been associated with the oral polio vaccine, a live attenuated virus vaccine that is taken by mouth and now usually contains all three types of polio viruses. It causes an infection that should

produce a long-lasting immunity. Eighteen cases of paralysis have occurred in previously healthy recipients and 47 cases in healthy close contacts of individuals who took the vaccine. Eleven cases developed in persons who had serious impairment of their immune systems, either because of cancer chemotherapy or because of a genetic deficiency.

242,000,000 doses of oral vaccine were administered.

The live polio vaccine normally causes an innocuous poliomyelitis infection with the vaccine virus, which produces a long-lasting immunity to all polio. This infection rarely can cause paralysis. When the oral vaccine is taken by one member of the family, there is a remote possibility that another member of the family could become infected with the vaccine virus and could develop paralysis. The risk of either of

these events occurring is exceedingly small. Two hundred and forty-two million doses of oral vaccine were given between 1969 and 1978, so the risk is about one in every three million doses.

In a review of paralysis in vaccinated individuals conducted in 1964, 77 percent of the cases occurred in persons over 14 years of age. For some unknown reason, over 80 percent involved males. As a consequence, the use of oral vaccine in persons "over school age" was no longer recommended. The change in vaccination practice probably occurred relatively slowly.

Today's vaccine is more potent and should be 96 to 98 percent effective.

The problem of infection in contacts remained. Unlike the recipients of the vaccine, contact cases were almost as frequent in females as in males. Cases occurred in children less than 8 years of age (45 percent) or in adults (57 percent) but not in persons aged 9 to 17.

What is particularly troubling is that, in five of the contact cases, patients had received at least three doses of the inactivated (killed) poliovirus vaccine. It should have provided protection against paralytic disease. The reason for its failure was not apparent but probably reflected the 5 to 10 percent failure rate of the commercial vaccine used then. The vaccine now available is more potent and should be 96 to 98 percent effective.

Dr. Jonas Salk, developer of the killed virus vaccine, feels that it is safer and just as effective as the live virus vaccine. In Sweden and Finland, where only killed virus vaccine has been used, the last cases of polio occurred in 1964. The experience there indicates that the proper use of the killed virus vaccine can effectively eradicate polio. In the U.S., it is

unlikely that we can be assured of the extremely high vaccination rates that have been possible in Scandinavia. Apparently, all citizens there take the four necessary injections.

Live virus still used because it induces intestinal immunity.

The live virus vaccine is still used for children because it induces intestinal immunity so that infection with the wild virus will not occur. It is simple to administer, is well accepted by patients, and results in immunization of some contacts of vaccinated persons.

The Committee on Infectious Diseases of the American Academy of Pediatrics and a special committee of the Institute of Medicine of the National Academy of Science have made the difficult decision that the live virus vaccine is preferred for children.

If adults who have not been vaccinated expect to travel in countries where polio is still prevalent, or if cases break out in this country, they should receive three injections of the killed virus vaccine about one or two months apart. A fourth dose should be given 6 to 12 months after the third. If too little time is available to complete the series before leaving on an international trip, the first two can be compressed into eight weeks and the rest given later. It is not known how soon booster doses of either the live or killed virus vaccine should be given. A dose of the killed virus vaccine every five years has been suggested for persons who may be placing themselves at increased risk.

One should remember that no vaccine is 100 percent safe or effective. When the alternative is a possible infection with a sometimes fatal, sometimes permanently disabling disease, it is a small risk with a great potential benefit.

Pfuderer appointed assistant to ORNL associate director

Helen A. Pfuderer has been appointed technical assistant to Chester R. Richmond, associate director for Biomedical and Environmental Sciences at ORNL.

In her new position, Pfuderer will assist in the administration and management of a \$50 million budget covering programs in the Health and Safety Research, Environmental Sciences and Biology Divisions, as well as the life science synthetic fuels program and the University of Tennessee/Oak Ridge Graduate School of Biomedical Sciences.

Pfuderer, a native of Ames, Iowa, received bachelor's and master's degrees from Iowa State University and the University of Tennessee, respectively. Currently, she is working toward a graduate degree in industrial management at the University of Tennessee.

In 1971, Pfuderer joined ORNL's Ecological Sciences Information Center and became its director in 1974. She was promoted to head of the energy and environmental sciences department, Information Center Complex of the Information Division in 1978.



Helen A. Pfuderer

She is a member of several professional organizations, including the American Nuclear Society for which she was program chairman.

Her husband, Peter, works in the Biology Division. They live in Oak Ridge at 232 Outer Drive with their daughters, Katie and Susie.

about people...



Sellers



Cronan

Hurst

Fred H. Hurst, ORNL Chemistry Division, has accepted an honor award on behalf of ORNL as a finalist in the 1979 Kirkpatrick Chemical Engineering Awards competition sponsored by the magazine, **Chemical Engineering**.

The award, presented by editor-in-chief of the magazine, Calvin S. Cronan, honors a process developed principally by Hurst and **David J. Crouse** of the Chemical Technology Division that retrieves uranium during the production of phosphoric acid for fertilizer use and has the potential for significantly extending U. S. uranium ore production.

Wanda Sellers, Y-12 Engineering Division, was recently named Secretary of the Year by the Knoxville Chapter of the National Secretaries Association. She was also tapped as the 1979-80 candidate for the International Secretary of the Year competition and will represent the Knoxville Chapter in the Tennessee Division contest. A native of Knoxville, Sellers joined Union Carbide in 1978, shortly after receiving her Certified Professional Secretary rating. She is a graduate of Knoxville Business College and is currently attending the University of Tennessee. She is presently editing the NSA newsletter in Knoxville. Sellers and her husband, Carl (in Y-12's Maintenance Division), live at 6901 Greenbrook Drive, Knoxville. They have a daughter, Angela.

question box...

If you have questions on company policy, write the Editor, **Nuclear Division News** (or telephone your question in, either to the editor, or to your plant contact). Space limitations may require some editing, but pertinent subject matter will not be omitted. Your name will not be used, and you will be given a personal answer if you so desire.

Security clearances

QUESTION: What is Company policy on holding a person in clearance? My wife was put in clearance over a year ago and has not been called for employment.

ANSWER: There is no Company policy which provides specific guidelines on the amount of time that an applicant's security clearance will be maintained in an active status. Generally, applicants who have been granted security clearances are scheduled to report to work as openings which cannot be filled from within actually occur.

In some cases, openings occur prior to or soon after the applicant is granted a clearance, and in these cases the applicant can be scheduled to report to work soon after the clearance is granted. In other cases, it may be several weeks or even several months before an appropriate opening occurs. In still other cases, the projected openings do not occur and the applicant may therefore never be scheduled to report to work.

Generally, an applicant's security clearance will be maintained in active status as long as the company has a reasonable expectation that an appropriate job opening will occur.

Pigeon problem

QUESTION: Can something be done about the pigeons roosting on the sides of Building 9202 in Y-12? The upper floors have no air conditioning, and the doors must be opened for cooling. Rain run-off and air currents carry the droppings, feathers, etc., into the building. This health hazard has been pointed out to both the Safety and Health-Hygiene Departments.

ANSWER: The Y-12 Plant has a program to control the pigeon population. Prompt action will be taken to alleviate the undesirable conditions at Building 9202.

Automobile use

QUESTION: Most of us certify that we do not use our personal automobiles for business purposes other than to drive to and from work. What is Company policy regarding an employee's automobile liability when the employee is on travel status using his/her personal car? At Company convenience? At employee convenience? To and from the airport?

ANSWER: When it is necessary for an employee to use his/her personal car in connection with a business trip and this is approved by management, the employee is paid 18-1/2¢ per mile plus parking and toll fees. Any additional costs for fuel, maintenance, or insurance (liability and collision) are not paid for by the Company.

Vacation in error

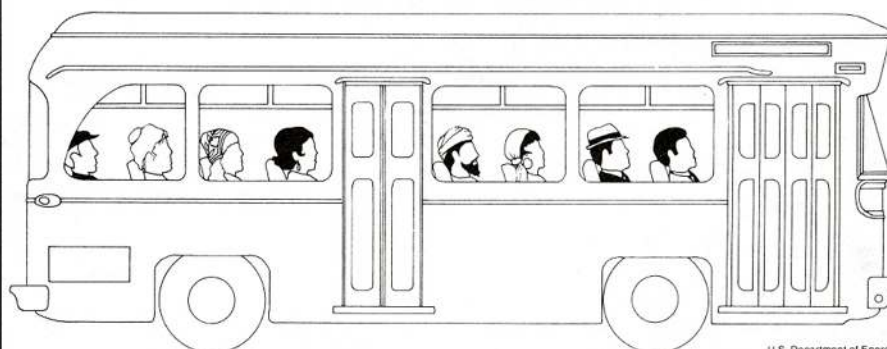
QUESTION: A person on the hourly payroll was told by his supervisor that he had one day of vacation that he needed to take before the end of the year. After taking the vacation, he was informed that it had been a mistake, and he was given an excused absence without pay. Is it right that he should have lost a day's pay, since he was told to take the vacation?

ANSWER: A grievance has been filed concerning this question and is being processed in the normal manner. This column is not intended to substitute for the normal grievance process in resolving problems that may arise from time to time in connection with matters covered by our agreements with unions representing hourly employees.

Next issue...

The next issue will be dated February 7. The deadline is January 30.

TAKE THE BUS, SAVE ENERGY.



U.S. Department of Energy

recreationotes. . .

Bowling League highlights. . .

ORNL A. . .

The Turkeys lead the A League the first week of the second half of play. ORAU rolled a 3058 to win the weekly high series. P. Davis, ORAU, won high handicap series with a 705. Tommy Underwood, Fireballs, rolled a 251 handicap game. Ray Winnie, Limits, posted a 234 high scratch game.

UCC Mixed. . .

The Safeguards eked out a win to take the season's first half, ahead of the Go Getters and the Topsy Turtles. High team series is still held by the Hell Raisers with a 2529. John Brown, Topsy Turtles, holds the high men's series with a 717 handicap score. For the women it's Jody Walker with a 705.

Y-12 C. . .

The Badgers, Anodes and Rollmasters won four points to take the initial lead in the Y-12 C League. Al Gladson, Big Orange, has the season high for game and series with handicap scoring of 248/658.

K-25 Wednesday. . .

The Destroyers took 24 points from the Losers to move into first place for the second half. The Demons and DLM Used Cars are tied for second place. Highs for the week went to Ted Bartlett, Demons, with a game of 240. Calvin Wright, also of the Demons, rolled high series of 642.

Family Mixed. . .

The Strike-Outs lead the Family Mixed by six points. Season high handicap series is held by R. B. Amos with a 690 and Edith Duckworth for her 671. Weekly scratch series went to John Brown with 575; and Tillie Plaza with 544.

Y-12 Classic. . .

Kingpins, Playboys and All Stars took four points to take an early lead in the Classic League's second half. Weekly highs went to the Playboys for their 2972 series. The Splinters rolled a 1068 high handicap game. Bob Crowe, Kingpins, rolled a 255 for high handicap game. Charlie Baxter, Mets, took high series with a 649.

ORNL C. . .

The Remkeys were winners of the first half in ORNL's C League. Weekly highs went to the Engineers for Series of 2923. The Knuckleheads' Guevin, rolled a 637 high handicap series. The Engineers' Samuels posted a 240 high handicap game, with high scratch game going to S. Brown, Alley Rads, with a 215.

UCC Monday. . .

Charlie's Angels won the first half in the Monday Mixed League, ousting the Free Spirit team. Tom Peek, 3 Tall & 1 Short, holds the high handicap series with 688.

K-25 Tuesday. . .

The Fearless 5 lead by 11 points in the Tuesday Men's League followed by the All Stars. Weekly highs went to Carl Saffell for high scratch and handicap series, who posted a 511/647. J. E. Shoemaker rolled a high 206 scratch game and C. E. Jones took a handicap game of 238.

Don't use energy-consuming special features on your appliances if you have an alternative. For example, don't use the "instant-on" feature of your TV set. "Instant-on" sets, especially the tube types, use energy even when the screen is dark. Use the "vacation switch," if you have one; plug the set into an outlet that is controlled by a wall switch.



TOASTMASTER OFFICERS—The Oak Ridge Toastmaster Club has elected officers for the new year, including, from left, Charles Gillihan, president; Ordean Oen, secretary; Kurt Spath, treasurer; Ted Williams, educational vice president; and Richard Mark, sergeant-at-arms. Not pictured is Bert Neiman. The club meets at the Alexander Hotel each Monday at 5:45 p.m. Guests are always welcome.



'THOUSAND CLOWNS'—Part of the cast for the Oak Ridge Playhouse's next production is seen at a recent rehearsal. From left are Lynn Peacock, Steven Dickens, Bob Hager, Kathy Samuels and Pete Dittner. The comedy will be presented January 25 and 26 and February 1, 2, 8 and 9 at 8:20 p.m. at the Playhouse.

Fishing rodeo winners named

The Recreation Department has announced the winners in fishing rodeos in the three Oak Ridge plants. By species, they are as follows:

Y-12 PLANT

Largemouth bass	
J. W. Marshall	7 lbs.
R. F. Wyatt	5 lbs. 2 ozs.
Smallmouth bass	
William D. Hammond, son	6 lbs. 2 ozs.
Charles Beal	4 lbs. 12 ozs.
Carl D. St. Onge, son	4 lbs. 3 ozs.
Striped bass	
G. H. Caylor	2 lbs. 14 ozs.
Walleyed pike	
S. P. Eubanks	6 lbs.
J. W. Graves	4 lbs. 5 ozs.
J. W. Stair	2 lbs. 6 ozs.
Sauger	
Arnold K. Craft	3 lbs. 11 ozs.
R. S. Phillippi	3 lbs. 8 ozs.
Richard E. Tippy	3 lbs.
Crappie	
David Pate	2 lbs. 1 oz.
G. R. Taylor	1 lb. 4 ozs.
Bream	
Loyd E. Wyatt	1 lb.
H. A. Price	11 ozs.
Trout	
Joe Jackson	1 lb. 1 oz.
Ralph E. Ruby	1 lb. 1 oz.
Rock fish	
David Gillespie	44 lbs.
Rough fish	
H. N. Benninghoff	32 lbs.
C. B. Russell	17 lbs.

Y-12 winners may pick up their awards at the Recreation Office, Building 9711-5.

Bridge playing attracts retirees

Union Carbide Retirees Association meets for bridge the second and fourth Thursday of each month at the Senior Center in Oak Ridge.

Drawings are held for partners, so you don't have to bring one. They gather at 1 and play contract bridge until 4:30 p.m. All UCRA members who enjoy bridge are invited to attend.

ORNL

Largemouth bass	
J. E. Layne	5 lbs. 2 ozs.
Lee Roy Loop	4 lbs.
Smallmouth bass	
F. E. Jones	4 lbs. 3 ozs.
Striped bass	
W. J. Martin	2 lbs. 10 ozs.
Sauger	
Charles A. Stanley	3 lbs. 2 ozs.
David W. Collins	3 lbs. 2 ozs.
Ralph L. Clark	3 lbs. 1 oz.
Bream	
D. L. Bowling, son	1 lb. 4 ozs.
Trout	
P. E. Phillips	2 lbs. 4 ozs.
D. G. Cottrell	1 lb. 3 ozs.
Hybrid or Rock fish	
H. J. Lackey	29 lbs. 8 ozs.
R. H. Freeman, son	24 lbs. 9.5 ozs.
W. H. Miller Jr.	22 lbs.
Rough fish	
Vernon G. Moore	9 lbs. 12 ozs.

ORNL fishermen may pick up their awards at Room J-108, 4500N building.

ORGDP

Largemouth bass	
B. A. Guy	6 lbs. 12 ozs.
J. E. Griffies	6 lbs. 10 ozs.
R. F. Garrett	6 lbs. 6 ozs.
Smallmouth bass	
Larry Hodge	6 lbs. 14 ozs.
R. E. Collins	3 lbs. 8.5 ozs.
R. L. Anderson	3 lbs. 6 ozs.
Striped bass	
H. E. Walters, wife	3 lbs. 2 ozs.
Frank Hayes	1 lb. 2 ozs.
Walleyed pike	
A. R. Walters	4 lbs.
Sauger	
P. D. Brooks	3 lbs. 14.5 ozs.
J. H. Fletcher	3 lbs. 4 ozs.
B. E. Woody Jr.	3 lbs. 1 oz.
Crappie	
W. H. Caylor, son	1 lb.
Bream	
Ben A. Austin, son	9 ozs.
Trout	
A. D. Reeder	3 lbs. 4 ozs.
Rough fish	
R. E. Cassell	24 lbs.

ORGDP fishermen will find their awards in room C-136, K-1001.

Baxter, Bryson, Coker, Yearwood named to new positions in Y-12



Four promotions are announced at the Y-12 Plant as Don E. Baxter is promoted to a supervisor in the Fabrication Division; Lloyd G. Bryson a senior engineering assistant in Product Engineering; William A. Coker, a supervisor in Metal Preparation; and F. Lynn Yearwood is promoted to a senior engineering assistant in the Development Division.

Baxter, a native of Newport, joined Union Carbide in 1968 after working as an apprentice die maker and machinist for Fisher Body. Married to the former Peggy L. Farley, he lives at Route 2, Friendsville. The Baxters have two children, Preston and Bradley.

Bryson was born in Struthers, Ohio, and has a BS and an MS from the University of Tennessee. He rejoined Union Carbide in 1978, having previously worked in Y-12 in the Development Division for 12 years. He lives at 107 Placer Lane, Oak Ridge. Bryson has four children, Becky, Karen, Janet and Lee.

Coker, a native of Concord, joined Union Carbide in 1950. He and his wife, the former Jean Davis, live at 713 Concord Road, Concord.

Yearwood was born in Knoxville and attends the University of Tennessee. He joined Union Carbide in 1970 after working with Knoxville Truck Sales and Tolson and Coleman Truck Lease. He and his wife, the former Judy Smelser, live at 4505 Brown Gap Road, Knoxville. They have two sons, Kevin and Jason.

Appliances point to energy waste

Energy efficiency may vary considerably in appliances though models seem similar, advises the Department of Energy.

A number of tips are pointed out in buying or using appliances:

- **Don't leave your appliance running when not in use.** It's a total waste of energy. Remember to turn off the radio, TV, or record player when you leave the room.

- **Keep appliance in good working order** so they will last longer, work more efficiently, and use less energy.

- **When buying appliances, read labels carefully.** Compare energy use information and operating costs of similar models by the same and different manufacturers. The retailer should be able to help you find the wattage of the appliance.

- **Before buying new appliances with special features, find out how much energy they use compared with other, perhaps less convenient, models.** A frost-free refrigerator, for example, uses more energy than one you have to defrost manually. It also costs more to purchase. The energy and dollars you save with a manual defrost model may be worth giving up the convenience.

- **Use appliances wisely;** use the one that takes the least amount of energy for the job. For example: toasting bread in the oven uses three times more energy than toasting it in a toaster.

retirements...



Eugene Gottschalk
Plant Engineering
Paducah
17 years service



Sally B. Cornell
Nuclear Materials
Accountability, Y-12
28 years service



Aubrey J. Jeffers
Guard Department
Y-12
34 years service



Homer Jeffers
ORGDP
Maintenance
36 years service



Dennis W. Woods
Guard Department
Paducah
28 years service



Beach P. Jones
Power, Utilities &
Chemical, Paducah
27 years service



John W. Hauseman
Cascade Operations
Paducah
28 years service



Neal B. Canter
Fabrication Shop
Paducah
28 years service



Charles W. Hamill
Development
Y-12
28 years service



Iya H. Jones
Chemical Services
Y-12
30 years service



Bert Searles
Product Certification
Y-12
25 years service



Grady W. Smith
Maintenance
Y-12
29 years service



Max Bezik
Development
Y-12
27 years service



Lou Kovach
Development
Y-12
26 years service



Orren K. Sergeant
Fabrication Division
Engineering, Y-12
29 years service



James Arrington
Special Services
Y-12
35 years service

anniversaries...

ORNL

30 YEARS

Edward S. Bomar Jr., Metals and Ceramics; John W. Brown Jr., Central Management; and Ned J. Kiker, Engineering.

25 YEARS

John A. Auxier, Charles D. Goodman and Earl D. Clemmer.

20 YEARS

Luther L. Leavell, Doris J. Hamby, Harrison H. Thomas and Grier E. Whitesides.

PADUCAH

35 YEARS

Charles E. Harless, Fabrication and Maintenance Division.

20 YEARS

James M. Yancey.

ORGDP

35 YEARS

Alma Dodd, General Accounting; Gwinn Marrow, Maintenance; Katherine B. Terry, Finance, Materials and Services; Ernest Williams, Maintenance; Raymond Hurst, Maintenance; Charles Goodman, Operations; James Waddle, Operations; William Roes, Operations; Elroy Richeson, Maintenance; Coxa Stinnett, Finance, Materials and Services; and Cleophus Haire, Maintenance.

30 YEARS

Guy Hargis, Maintenance.

25 YEARS

Alan Hoose and Bowman Tomlinson.

20 YEARS

Thomas Allison.

Safety Scoreboard

Time worked without a lost-time accident through January 17:

ORGDP.....401 Days
ORNL.....80 Days
Paducah.....238 Days
Y-12 Plant.....44 Days

12,593,535 Employee-Hours
2,088,036 Employee-Hours
2,520,000 Employee-Hours
1,284,000 Employee-Hours

'Best-ever' safety record

(Continued from Page 1)

employee suffered burns while attempting to start a fire in a pile of scrap lumber with gasoline. The sixth case was a "moped" accident in which an employee suffered a broken leg.

Away from work

Off-the-job accidents continue to plague Division employees, as 256 occurred last year, including five fatalities. Four of these fatalities involved traffic collisions and the last one resulted from a tractor accident. Of the 256 cases reported, 113 occurred in homes, 73 in transportation and 70 in public.

Workdays lost due to off-the-job disabling injuries, not including any charge for the fatalities, totals 7,211—39 times the days lost due to on-the-job lost workday injuries.

A marked improvement in our safety performance, both on and off the job, proves that our efforts are paying off.

Ideally, the perfect record—no disabling injuries at all—is the ultimate goal.

The reward—a safe working environment for all of us.

Savings Plan-Personal Investment Account

	Fixed Income Fund	UCC Stock	Equity Investment Fund
December 76	13.0553	59.2723	8.8166
December 77	14.2017	40.9096	8.0427
October 79	16.6451	40.7645	9.4576
November 79	16.7742	39.4002	9.8116
December 79	16.8967	41.4300	9.9507

Note: Fixed Income Fund unit values reflect interest additions to achieve the guaranteed effective annual interest rate of 9.1% for 1979. Union Carbide stock values are the average cost of stock purchased during the month. Equity Investment Fund unit values represent the month-end market value of securities held by the Fund. The price of each unit is determined by dividing the total value of the securities by the number of units in the Fund.

division deaths...

Bobby G. Pierce, a utilities supervisor in the ORNL Operations Division, died January 14 after a Knoxville traffic accident.

A 26-year Carbide employee, Mr. Pierce lived at 2246 W. Gilbert Lane, Knoxville.

Survivors include his wife, Audrey; and sons, Bobby and Bradley, all of Knoxville.

Services were held at Berry Funeral Home, Knoxville. Burial followed at Woodlawn Cemetery.

David H. Everett, an eight-year ORNL employee, died January 14 after a traffic accident in Knoxville.

Mr. Everett, who was a steam power operator in the Operations Division, lived at 4503 Cardinal Avenue, Knoxville. He was a member of West Haven Baptist Church and Beaver Ridge Masonic Lodge 366.

Survivors include his father, Leon; and sister, Adah Joslin, both of Knoxville.

Funeral services were held at Weaver Funeral Home, Knoxville, with burial in Edgewood Cemetery.

Charles E. Houston, an instrument technician in the ORNL Instrumentation and Controls Division, died January 5. A four-year employee, he lived at 103 Sanford Lane, Oak Ridge.

Survivors include his wife, Ann Thomas Houston; mother, Lucille Houston of New Smyrna Beach, Florida; and sister, Melynda H. Duh, also of New Smyrna Beach.

Graveside services were held at Glen Cove Road Cemetery in New Smyrna, and a memorial service was conducted at the Kingdom Hall of Jehovah's Witnesses, Oak Ridge. The family has requested that any



Mr. Pierce



Mr. Everett



Mr. Houston



Mr. Waraksa

memorials be made to The Watch Tower Society, 117 Adams Street, Brooklyn, New York 10021.

Alexander J. Waraksa Jr., a supervisor in Y-12's Maintenance Division, died January 13 at his 106 Wildwood Drive, Oak Ridge, home. A native of Jersey City, N.J., he was a veteran of the U. S. Air Force and joined Union Carbide in 1969.

Survivors include his wife, Helen Dardis Waraksa; sons, Peter, Michael and Alex; daughters, Dorothy and Ann; his father, Alexander J. Waraksa Sr.; brother, Dan; and sister, Dorothy.

Services were held at St. Mary's Catholic Church.

The family has requested that any memorials be in the form of contributions to the Regional Mental Health Center, 240 West Tyrone Road, Oak Ridge.



CASE BY CASE STUDIED—One of the prime reasons for the reduction in recordable injuries and illnesses at ORGDP is the formal review of each case by the manager of the division, where the injured employee, his supervisor, a safety engineer and division manager discuss the cause, the corrective action taken, and the future plans to prevent a recurrence. From left are Paul K. Sherrill, David H. Hammontree, Bobby G. Grant and L. A. "Tony" Dean.



TOTAL INVOLVEMENT—Safety achievements are accomplished through the combined efforts of all employees, hourly, weekly and supervisory. These involved employees include, front row from left, John A. Kobelski, Curtis A. Anderson, Mary S. Gibson, Jewell A. Cason, Elizabeth S. Phillips and Ronald W. Shepston. In the back row are Tommy D. Ray, Charles L. Nelson, James F. Braden, William M. Henley and Mary P. Jones.



UNION CARBIDE CORPORATION
NUCLEAR DIVISION
P.O. BOX Y, OAK RIDGE, TENNESSEE 37830

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